ARRANGEMENT IN AN INFINIBAND CHANNEL ADAPTER FOR SHARING MEMORY SPACE FOR WORK QUEUE ENTRIES USING MULTIPLY-LINKED LISTS

ABSTRACT OF THE DISCLOSURE

A channel adapter includes a work queue entry table having entries configured for storing work queue entries awaiting respective acknowledgements. Each entry includes a work queue entry field for storing a corresponding work queue entry, and first and second link fields for respective linked lists. The channel adapter also includes a table manager configured for creating the linked lists, based on prescribed network conditions, for example for storage of a first list specifying a transmission order of the work queue entry fields and a second list specifying an acknowledgement order. Hence, the multiple link fields enable the work queue entry table to be shared for respective linked lists specifying respective attributes relative to the stored work queue entries.